

Abstract of the Disclosure
DETECTOR AND LOCK CONTROLLER USING SAME

5 A lock controller for automatically unlocking and locking a lockable part such as
a vehicle door uses a detector for detecting a hand approaching inside a plurality of
detection areas. Such a detector is not only arranged to transmit electromagnetic waves
and to receive the reflected waves from a target object of detection such as a person's
hand but also provided with a plurality of wave detection circuit parts for mixing wave
10 detection signals corresponding to said transmission waves with signals received by said
reception antenna at different sampling timings and outputting the mixed signals. A
plurality of judging circuit parts each correspond to different one of the wave detection
circuit parts and serve to switch on a detection output based on the outputted signals from
said wave detection circuit parts to indicate that said target object is approaching and at a
15 speed within a specified range. The detection areas have different sizes for each of the
judging circuit parts corresponding to the different sampling timings of the wave
detection circuit parts.